

YUVA BIOSCIENCES SCIENTIFIC FOUNDER PUBLISHES COVID-19 RESEARCH IN THE AMERICAN JOURNAL OF PHYSIOLOGY

BIRMINGHAM, AL, August 25, 2020 – Yuva Biosciences, an anti-aging startup based on technology developed by one of the world leaders in mitochondrial sciences, Dr. Keshav K. Singh, today announced that Dr. Singh has published an article, “[Decoding SARS-CoV-2 Hijacking the Host Mitochondria in Pathogenesis of COVID-19](#)” in the American Journal of Physiology. Dr. Singh is the article’s lead author and is the Scientific Founder of Yuva Biosciences.

Mitochondrial dysfunction is one of the hallmarks of aging that contributes significantly to the physiology of aging as well as the pathophysiology of age-related disorders. With COVID-19, risk for severe illness increases with age. In the article, Dr. Singh and his co-authors outline results from studies of the original SARS virus and the current SARS-CoV-2 pandemic to suggest how the virus communicates with, and manipulates, mitochondria in human cells in order to evade those cells' immune defenses. They also discuss how age-related progressive decline in mitochondrial function can result in increased susceptibility to COVID-19 morbidity and mortality in older individuals.

Dr. Singh commented, “We know that the virus uses the host cell’s endoplasmic reticulum to derive double-membrane vesicles where it hides and replicates. In this paper, we have shown that there is crosstalk between the mitochondria and the endoplasmic reticulum, and when mitochondria are stressed, mitochondria-derived double membrane-vesicles can be formed where the virus can also hide.”

Yuva Biosciences is developing multiple approaches to enhance and restore mitochondrial function, initially targeting the hair and skin where loss of mitochondrial function results in hair loss and skin wrinkles. Improving mitochondrial function has the potential to help combat a variety of age-related disorders.

The article can be accessed at the American Journal of Physiology website,
<http://www.journals.physiology.org>

About Yuva Biosciences (www.yuvabio.com)

Yuva Biosciences is an anti-aging company harnessing the cutting edge of mitochondrial science to develop cosmeceuticals as well as pharmaceuticals targeted at aging-related hair loss, wrinkled skin, and reduced energy. The Company’s Scientific Founder and Chief Scientific Advisor, Keshav K. Singh, Ph.D., is a world leader in the field of mitochondrial biology and genetics and its role in health, disease, and aging. Dr. Singh is the Joy and Bill Harbert Endowed Chair and Director of Cancer Genetics at the University of Alabama at Birmingham and the founding Editor-in-Chief of the Mitochondrion journal published by Elsevier. Yuva Biosciences is headquartered in Birmingham, Alabama.